The Real Estate ANALYST

NOVEMBER 30 1955

APPRAISAL BULLETIN

Volume XXIV

© by ROY WENZLICK & CO., 1955

Number 53

Real Estate Economists, Appraisers and Counselors

DAMAGES RESULTING FROM CONSTRUCTION OF TRANSMISSION LINE

EXTENSIVE damages may result to a property with the granting or taking of an easement to construct a major electric transmission line. The extent of these damages is usually measured in terms of "before and after" market value appraisals. Naturally, the 'after' appraisal is the unknown quantity, and the approach to this valuation is the principal subject of this article.

You will notice that we said 'may result" in the first line. It is conceivable that in some cases no damage will be done, and certainly in most instances very little damage can be justified as a result of a high voltage transmission line through or adjoining a property. Through rural areas, for example, the productivity of the land will remain unchanged except for areas occupied by the bases of the steel towers.

Rather than trying to discuss all types of damages to all types of properties we would like to set forth in a few paragraphs the appraisal of damages to a tract of vacant ground potentially a location for a good subdivision. In this particular example we found considerable damages to the property because of its unique size and the unfortunate manner in which the transmission line affected the future use of the property.

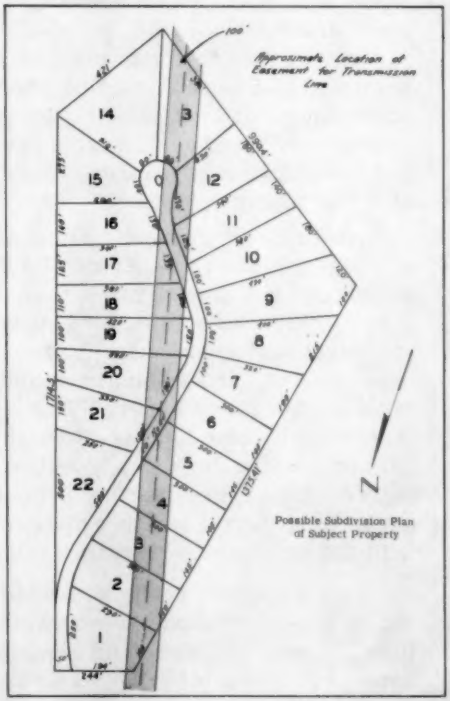
An electric company plans on constructing a major transmission line on a 100' easement, the terms of which would give the power company 'the right, privilege, and authority to construct, erect, keep, operate, and maintain thereon a line or lines of steel towers, poles, crossarms, wires, transformers, anchors, guy wires and appurtenances, for the purpose of transmitting electric energy or other power, and a telegraph and telephone line or lines in, on, along, over, through, across or under.' The easement would also permit the power company from time to time to cross through, over or under the subject property, to trim, cut and remove any trees, overhanging branches or obstructions, and the right of ingress and egress over the property. The owner of the property, on the other hand, would agree not to create or permit any obstruction that would interfere with the successful operation and maintenance of the transmission line.

This easement would not prohibit the construction of a street through or along the easement granted nor would it prohibit the construction of underground utilities. Also, the land could continue in its present use as farm land or could be used as part of a lot area of a future subdivision providing no improvements were constructed on that part of the land where the easement is located.

The property to be appraised for damages is an irregular piece of ground on a major highway, containing 26½ acres of cleared and cultivated ground. While this property is being used as a farm, it is located less than a mile from the edge of the urban development of a major city. Water supply will be available to the property within the very near future. The zoning at the present time requires a minimum lot area of 1 acre per dwelling unit, with a 3-acre requirement if a private road is used. We have concluded that the highest and best use of the property today and in the future is for subdivision purposes, and have concluded a fair market value before knowledge of the easement of $1,500 per acre. This value was established by carefully examining numerous transfers of ground of all types in the immediate vicinity.

The accompanying sketch shows a possible subdivision of this property into 22 lots, each containing more than 1 acre. This drawing also shows the location of the proposed easement virtually through the very center of the property. Because of the property's shape and the zoning requirement, this is the most desirable and economic way of subdividing this land. If the tract were larger, it could be subdivided in such a manner as to put the rear of the lots to the center of the transmission line, thereby minimizing the damage.

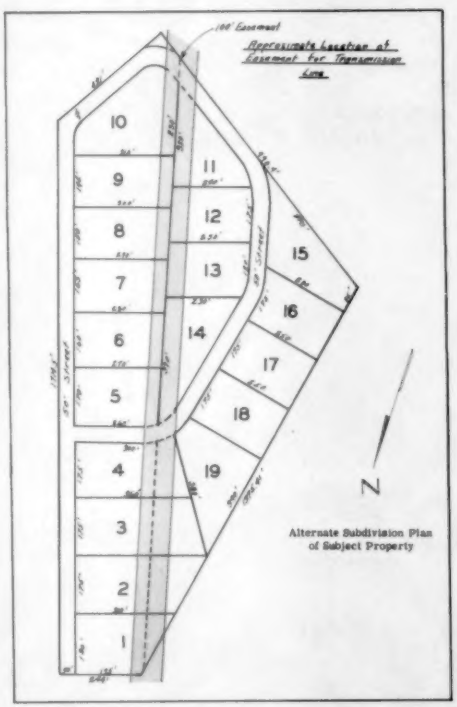
It is always a temptation to base an estimate of damage upon the unsightliness of the transmission line, the probable radio and television interference, or the fear and danger of the line itself. Numerous court cases, however, have shown that these items in themselves are non-compensable damages. Even though you and I know that this tract of ground would be much more desirable without the transmission line than with it, we cannot base our knowledge on only unsightliness before the courts. Data has also been presented in our courts which proves that these transmission lines will not affect radio or television reception, and that any danger of lines or towers falling or conducting lightning is a remote possibility which could not affect adjoining properties.



For this reason we have based our estimate of the damages solely on the use to which the property can be put after the transmission line is constructed and the difference in market value before and after the taking of the easement. Since it is doubtful whether financing could be obtained for a subdivision which had a trans-

mission line down the fronts of the properties, we have tried to prepare a subdivision of this tract which would place the transmission line behind the properties. For this reason we have subdivided the subject property in a different manner in order to place the 100' easement in the rear of the platted lots. The accompanying sketch illustrates one alternate plan for developing the property with the transmission line. It can be stated that this type of development would not be so attractive as the first plan. In the first place, the subdivision would tend to "fall apart" with the houses facing away from each other and facing adjoining properties whose development would be an uncertainty. Secondly, the road which would have to be constructed for this subdivision is approximately 2,000 feet longer than the road shown in the first plan. Thirdly, only 19 lots could be obtained instead of 22, and in general these lots, because of their shape, and because of the transmission line through the rear or side yards, would not be quite so marketable as in the original plan.

Under the first plan shown, 22 lots could be very conveniently arranged on a road approximately 1,700 feet long. Based on the appraised value before easement of $39,750, each lot as raw land without a street would be worth approximately $1,800. The plan shown with 19 lots and the transmission line has a street approximately 3,700 feet long. In our opinion, each of these lots as raw land and without a street would have an average value of approximately $1,500, or a total of $28,500. Part of the damages, therefore, is the difference between the raw land value of the 22 lots and of the 19 lots ($39,750 less $28,500), which is $11,250.



Alternate Subdivision Plan of Subject Property

In order to obtain the 19 lots, however, it would be necessary to construct approximately 4,450 square yards of additional street. We have estimated the cost of the water line for the subdivision to be about the same in either case since it could be placed through the easement. An approved macadam 20' street would cost an estimated $1.90 per square yard. For the extra street required with 4,450 square yards of pavement, the estimated cost would be $8,450. Adding this to the $11,250 loss in value shown above results in a figure of $19,700.

The property owner on the east, however, should be very interested in this street along the eastern lot line of the subject property and ought to be willing to pay half of its cost since desirable street frontage would be created for his adjoin-

ing property. The adjoining property owner's share in this street would be approximately $3,600. Deducting this from $19,700 results in $16,100 damages, which represents the loss in value and the additional construction cost of a street in order to develop the proposed subdivision.

Using a slightly different approach we have estimated the land under the easement itself to be worth only $350 per acre after the transmission line is erected. This land would be comparable to other unbuildable land in the vicinity and would have a value only for gardens or farming. As nearly as we can estimate, 4.36 acres would be affected completely by the easement. Multiplying this by $350 results in a value for this acreage after the transmission line has been constructed of $1,525. The remainder of the subject property, 22.17 acres, would have a value after the construction of the transmission line of $1,000 per acre in our opinion. This value would compare with other irregular shaped pieces in the neighborhood not entirely suitable for convenient subdivision. Multiplying 22.17 by $1,000 results in an appraised value of $22,170. Adding this to the $1,525 gives a total value after the construction of the transmission line of $23,695, which we shall call $23,700. Deducting this from the appraisal of the land before easement of $39,750, results in a total loss in value of $16,050, call $16,100, damages, which coincides with the figure obtained by attempting to subdivide the land with and without a transmission line.

James R. Appel

JAMES R. APPEL